

REMARKS

Claims 1-15 are presented. Claims 1, 14 and 15 are independent. Formal corrections have been made to claims 1, 4, 7, 14 and 15. It is respectfully submitted that the claims as amended and resubmitted are allowable.

The Examiner rejects claims 1-5, 13 and 14 under 35 U.S.C. §102(b) as being anticipated by either Araki or Hecht et al., '131, and rejects claims 6-12 and 15 under 35 U.S.C. §103(a) as obvious in view of the same patents.

The rejections are respectfully traversed.

Independent claims 1 and 14 recite a housing with

- a cavity comprising a channel for the fluid to be measured (claim 1) or
- a channel for the fluid to be measured (claim 14).

No such housing is disclosed explicitly in either Araki or Hecht et al. The Office Action fails to indicate where such a housing would be disclosed in Araki. It identifies parts 51, 1, 26, 15, 37, 8 of Hecht et al. with the housing but does not explain where the channel for the fluid to be measured would be.

Furthermore, the claims recite an opening in the housing which

- extends from the cavity through the housing to an outside of the housing (claim 1) or for accommodating a lead-through for connecting the semiconductor chip to an outside of the housing (claim 14).

No such opening is disclosed explicitly in either Araki or Hecht et al. The Office Action fails to indicate where such an opening would be in Araki; as to Hecht et al., if the parts 51, 1, 26, 15, 37, 8 (Hecht et al, Fig. 1 and Office Action, section 4 on page 2) are identified with the housing, it is not clear where the opening would be.

According to both claims, a hardened filler material should be arranged in the opening, sealing the opening and mechanically connecting at least one electric lead-through to the housing.

In section 3 on page 2, the Office Action identifies resin base 19a of Araki with the filler material. But Araki fails to disclose that the filler material is arranged *in the claimed opening* of the housing. In fact, Araki does not disclose how resin base 19a should be arranged with respect to the housing of a flow channel. Obviously, the measuring section of the chip 15 of Araki would have to be located inside the channel, and the lead portion would have to lead out of the channel.

But this does not imply that resin base 19a would have to sit in an opening in the housing wall of the channel. It just as well could sit outside the housing or inside the channel, close to the opening. In particular, Araki does not disclose that the resin base 19a *seals* the opening and *mechanically connects* the lead-through(s) to the housing as claimed, even if we assume (for argument's sake) that base 19a is arranged in the opening.

Similarly, the Office Action identifies protective coating 42 of Hecht et al. with the specified filler material. This seems to assume that the opening is *near* the filler material. But there is nothing that could be considered to be an opening in the housing of Hecht et al. that (a) connects the cavity/channel for the fluid with the exterior, (b) has a lead-through extending through it, and (c) is filled with a hardened filler material.

Hence, the present claims 1 and 14 are not anticipated or suggested by Araki or Hecht et al.

We note with respect to the last sentence of the next-to-last paragraph of the Office Action that claim 15 as amended specifies the *steps* of forming the device. It is, in other words, a property formatted method claim.

The dependent claims deserve special consideration.

Claim 6 states that the opening extends through only one of several housing parts. In other words, the opening is a true “hole” in a single housing part and not formed between two adjacent housing parts. This is of particular advantage because in that case the filler material can provide an excellent seal of the hole, while if the opening is formed between adjacent housing parts, there remains the problem of sealing the seam between the housing parts. In addition, the manufacturing process is easier if the filling can be filled into a hole of a single part instead of having first to join two adjacent parts to form the opening. Neither Araki nor Hecht et al. teaches this idea. Araki does not disclose the housing at all (see above), and in particular not the number of its parts and the location of the opening. Hecht et al. discloses a multipart housing and the protective coating 42 is not arranged in an opening extending through only one of the housing parts.


Claim 9 states that the semiconductor chip is arranged in a recess in a second housing part and the opening extends through the second housing part. Neither Araki nor Hecht et al. make this arrangement obvious. Araki does not teach anything about the housing. Hecht et al. may disclose a recess in parts 4, 15, but the claimed opening is not located in these parts. According to the teaching of this patent, what is incorporated in the network is a metal oxide.

PATENT
S.N. 10/646,510
0796/70952

Withdrawal of the rejections and issuance of a notice of allowance are respectfully requested.

If a telephone interview would expedite the prosecution of the application, the Examiner is requested to call undersigned counsel.

Respectfully submitted,
COOPER & DUNHAM LLP

A handwritten signature in black ink, appearing to read "Donald S. Dowden". The signature is fluid and cursive, with the first name "Donald" being more prominent.

Donald S. Dowden
Reg. No. 20,701